UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,348	08/28/2003	Daniel Ray Downing	DN2001124D01	6674
27280 7590 04/30/2008 THE GOODYEAR TIRE & RUBBER COMPANY INTELLECTUAL PROPERTY DEPARTMENT 823			EXAMINER	
			PETERSON, KENNETH E	
	1144 EAST MARKET STREET AKRON, OH 44316-0001		ART UNIT	PAPER NUMBER
			3724	
			MAIL DATE	DELIVERY MODE
			04/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/650,348	DOWNING, DANIEL RAY				
Office Action Summary	Examiner	Art Unit				
	KENNETH PETERSON	3724				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 66(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 03 Ma	arch 2008					
· <u> </u>	· · · · · · · · · · · · · · · · · · ·					
<i>;</i>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
, <u> </u>	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
· ·	parto Quayro, 1000 0.5, 11, 10					
Disposition of Claims						
4)⊠ Claim(s) <u>1-5,20,22 and 37</u> is/are pending in the	4)⊠ Claim(s) <u>1-5,20,22 and 37</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-5,20,22 and 37</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) acce		Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.						
						2. Certified copies of the priority documents have been received in Application No
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

1. The amendment filed 27 Aug 07 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The changes to figure 5A is new matter. In the amended figure 5A, the angle α is shown being between the bottom of the cutting element (120) and the 1st side (bottom side) of the strip (1) on the θ 1 side of the anvil. In the specification, the angle α is defined most comprehensively in paragraph 42 as being between an unidentified surface of the cutting element (120) and the *second* side of the strip (1), without stating is this is in reference to the θ 1 or θ 2 side of the anvil. Furthermore, the original disclosure showed α in completely different locations in figure 7 and 8b.

The changes to figure 8b are new matter. The original description of the angles α , θ 1 and θ 2 are so vague that one of ordinary skill could not derive that the cut strip would have an angle of 90- α . See the 112 rejections below for an elaboration on why the angles α , θ 1 and θ 2 are vague.

Applicant is required to cancel the new matter in the reply to this Office Action.

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 1-5,20,22 and 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In general, the details of the cutting action do not enable one of ordinary skill to use the device to perform the recited function. The following questions should help Applicant ascertain the specification's shortcomings;

In paragraph 0015 is the step of "setting a gap distance (d) above the support approximately slightly less that or equal to the thickness of the cord reinforced component". Wouldn't the blade need to penetrate at least halfway into the cord reinforced component to engage and lift a cord as seen in figure 5B? If the gap is maintained at "slightly less that or equal to the thickness of the cord reinforced component", then the blade will never reach halfway into the cord reinforced component and the cut will never be completed.

In paragraph 0017 is the recitation "the means for supporting the strip has two surfaces inclined at angles θ1, and θ2 respectively, θ1 is preferably set about 2° less than the skive angle α, the angle θ2 is about 2° more than the skive angle α. In one embodiment, the skive angle α is set to about 8°. This phrase lacks clarity in several ways. What are these angles being measured relative to? Does the term "more" mean "more in the clockwise direction" or "more in the counterclockwise direction" when viewed from which side? The term "less" has similar problems. On page 8 of Applicant's remarks file 31 October 07, Applicant states that angles θ1 and θ2 are measured relative to the horizontal. Examiner notes that making remarks does not alleviate one from making corrections to the specification. Applicant is reminded that one of ordinary skill must be able to make and use the device based upon reading the

specification and drawings, and NOT upon reading Applicant's remarks. Even taking into account that θ 1 and θ 2 are measured from the horizontal, it is not clear if θ 1 is rotated clockwise or counterclockwise from the horizontal. Furthermore, the drawings (e.g. figures 5a-5c) show θ 1 as being zero degrees relative to the horizontal, thus creating further confusion.

4. Claims 1-5,20,22 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Examiner is required to read the claims in light of the specification. However, Examiner does not understand the specification, and therefor does not understand the scope of the claims. In particular, it is not clear how much weight should be given to the "gap", and the angles $\theta 2$, $\theta 1$ and α , nor what structure to infer from the phrase "cutting through the entire strip" when there is no disclosed mechanism for doing so (no "lifting" mechanism).

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-3,20,22 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al.'508 in view of Benzing, II et al.'101.

Bell discloses a method of cutting stock material comprising most of the method steps claimed including cutting the segment at a skive angle A. Note Figs. 6-7. Bell is silent as to the stock material being cord reinforced, but Benzing clearly teaches a method of cutting cord reinforced elastomeric strip material (loA) wherein during cutting, the cutter (12o) impacts the cord at an angle of less than 10° (line 48, column 6). Note Figs. 3A-D and 6. Benzing at least teaches and suggests that angled cutting of cord reinforced material is known and obvious in the art. Thus, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the method of Bell et al with the cutting of cord reinforced elastomeric material at an angle of less than 10° as taught and suggested by Benzing, as an alternate way of cutting Benzing's material. Note that this alternate way is suggested by Benzing himself on lines 32-34, column 9.

As discussed above, the meaning of Applicant's "gap" in not known, and thus Bell is deemed to have a "gap" to the same extent that Applicant does.

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al.'508 in view of Benzing, II et al.'101, as set forth above, and further in view of Sergel et al.'601 or Oldeman '774.

Bell, as modified above, discloses the invention substantially as claimed except that it appears Bell's support (e.g. at 10 in Fig. 2) lacks the θ 1 and θ 2 angles as claimed. However, Sergel and Oldeman teach a step of supporting the material wherein a means for supporting (e.g. 7, 8) having a first supporting surface is disposed at an θ 1 greater than the skive angle (formed by blade 12 - the first surface below 12)

and a second surface is oriented at an angle $\theta 2$ greater than or equal to the skive angle for the suggestive purpose of allowing for easy separation between the cut parts of the work. See also column 3, lines 42-65. Thus, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the modified method of Bell with step of supporting having the support surfaces and angles as taught and suggested by Sergel or Oldeman in order to facilitate production of the desired bevel angle.

8. Applicant's arguments have been fully considered but they are not persuasive.

Applicant has not removed the New Matter, and has not amended the specification to overcome the 112, 1st paragraph rejection. Examiner again suggests filing a CIP so that the inventive concept can be fleshed out without raising the issue of new matter.

New Matter in figure 5a

Applicant argues that the amendment to figure 5a is not new matter.

FACT – nowhere in Applicant's disclosure defines the angle α being between the lower surface of the knife and the upper surface of the workpiece.

In particular, the specification never indicates what PART of the knife the angle α is being measured from. Further compounding this issue is that the original figures 7 and 8b show the angle α being measured differently from the New Matter in figure 5a.

New Matter in figure 8b

Applicant argues that the amendment to figure 8B is not new matter.

While Examiner agrees there is support for there being an angle in the cut workpiece, Examiner cannot find support for that angle being as set forth in the new figure 8b.

The problem is the same as above, namely that the angle α was never accurately defined. Further compounding the problem is that the physical angle of the blade does not define the angle of the cut, but instead the *angle of motion* of the blade defines the angle of the cut. When the gap is maintained, the angle of the cut is θ 1- θ 2, not necessarily the elusive angle α .

Objection to figure 7

Applicant has overcome the objection.

112, 1st paragraph rejection

Applicant argues that one of ordinary skill in the art could make and use the device based upon the disclosure.

Applicant further makes clear that he is interested in the embodiment where the gap is maintained. Examiner will restrict his remarks to this embodiment with the maintained gap.

FACT – Applicant's disclosure never provides a mechanism to lift the cords over the blade so that the entire strip is cut.

With the gap being maintained, it is not clear what an operator must do to lift the cords from the position of figure 5a to the position of 5b. Examiner has asked this question numerous times, and it has never been answered.

Accordingly, one of ordinary skill would not know how to use the device, because he would not know what mechanism should be employed to lift the cords. This cord-

lifting is especially difficult to surmise when Applicant makes remarks like on lines 14 and 15 of page 9 of his most recent remarks that "Applicant's gap must be maintained during the cut to allow the cord reinforced tire component (20) to pass under the ultrasonic blade during the cutting procedure". This seems to contradict Applicant's other statements that the cord reinforced tire component is lifted over the blade. Which is it...does it stay under, or go over?

Applicant argues that the method could be determined without undue experimentation. If it is so easy, why has Applicant not told the examiner how it is done? Applicant's lack of candor in this regard is alarming.

Applicant argues that the angles θ 1- θ 2 and α are accurately disclosed. Examiner disagrees, for the reasons set forth above, and in previous actions.

112, 2nd paragraph rejection

Applicant argues that the scope of the claims are clear.

Examiner disagrees. Even if, through experimentation, an end user was able to determine the proper angles θ 1- θ 2 and α , and determine what mechanism should be employed to "lift" the cord layer, the claims still must be read in light of the disclosure, which is unclear on these issues. There may be excellent art that could be applied against the claims, but Examiner may not recognize it because he doesn't understand how the device works and therefor doesn't understand the scope of the claims. If the Examiner understood how the lifting occurs, he might very well have a completely different search to conduct.

Prior art rejection

Applicant's arguments with respect to the prior art are noted, but they hinge upon an understanding of the gap and angles that Examiner cannot find support for.

Full faith and credit

Examiner is not permitted to comment on whether the previous examiner deserves full faith and credit.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH PETERSON whose telephone number is (571)272-4512. The examiner can normally be reached on Monday-Thursday, 7:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KENNETH PETERSON/ Primary Examiner, Art Unit 3724